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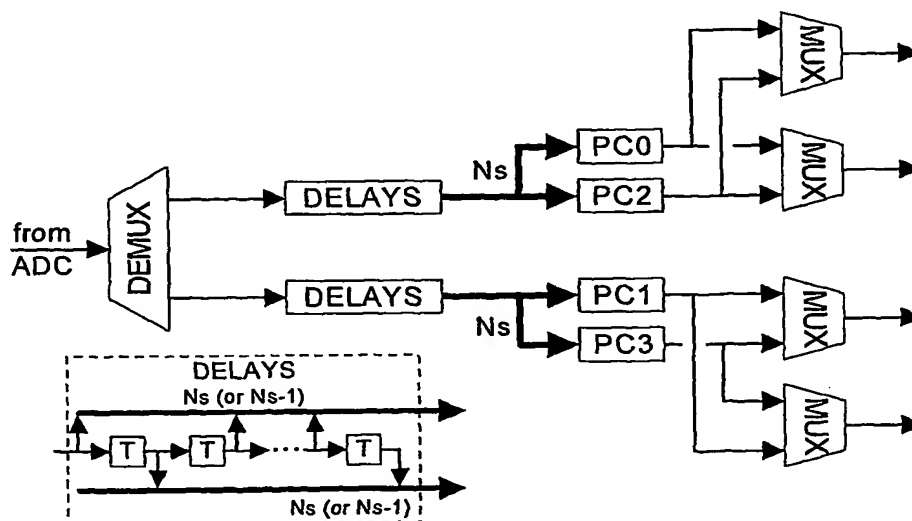
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(54) Title: DIFFERENTIAL PHASE DETECTOR



(57) Abstract: The present invention relates to a full-digital implementation of a differential phase detector and to an interpolator for such a differential phase detector. According to the invention a differential phase detector for generating a tracking error signal from the digitized signals (A, B, C, D) of four photodetectors, having a multiplexer for time multiplexing the digitized signals (A, B, C, D), includes a demultiplexer / interpolator for synchronizing the samples from the time multiplexed digitized signals (A, B, C, D). The demultiplexer / interpolator favorably receives a four signal time multiplex and generates four channels at half the speed of the time multiplex.



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